CLAIM AMENDMENTS

This listing of claims will replace all prior versions, and listings, of claims in the application:

1. (Currently Amended) An image sensor comprising:

a plurality of pixels formed in a semiconductor substrate, each pixel including a light sensitive element;

a micro-lens over each of said light sensitive elements; and

a layer of oxide disposed between the light sensitive elements and the micro-lenses, wherein the layer of oxide includes a horizontal top surface and raised ridge structures formed from the layer of oxide extending above the horizontal top surface and surrounding each of said micro-lenses, wherein each said raised ridge structure has a triangular cross-section and at least partially supports said micro-lens, wherein the micro-lens overlays a base portion of the raised ridge structure such that a maximum width of the micro-lens is greater than a width of the micro-lens at the horizontal top surface of the layer of oxide.

2. (Original) The image sensor of Claim 1 wherein said raised ridge structure is circular.

3. (Previously Presented) The image sensor of Claim 1 wherein said raised ridge structure confines said micro-lens.

4. (Original) The image sensor of Claim 1 wherein the micro-lenses are formed from polymethylmethacrylate (PMMA) or polyglycidylmethacrylate (PGMA).

5. (Previously Presented) The image sensor of Claim 1 wherein said raised ridge structure has a height of about 0.2 microns.

6. (Cancelled)

7. (Original) The image sensor of Claim 1 further including a color filter layer between said micro-lenses and said light sensitive elements.

8. (Currently Amended) A pixel of an image sensor comprising:

a light sensitive element formed in a semiconductor substrate;

a micro-lens over said light sensitive element; and

a layer of oxide disposed between the light sensitive element and the micro-lens, wherein the layer of oxide includes a horizontal top surface and a raised ridge structure formed from the layer of oxide extending above the horizontal top surface and surrounding said micro-lens, wherein said raised ridge structure has a triangular cross-section and at least partially supports said micro-lens, wherein the micro-lens overlays a base portion of the raised ridge structure such that a maximum width of the micro-lens is greater than a width of the micro-lens at the horizontal top surface of the layer of oxide.

9. (Original) The pixel of Claim 8 wherein said raised ridge structure is circular.

10. (Previously Presented) The pixel of Claim 8 wherein said raised ridge structure confines said micro-lens.

11. (Original) The pixel of Claim 8 wherein the micro-lens is formed from polymethylmethacrylate (PMMA) of polyglycidylmethacrylate (PGMA).

12. (Previously Presented) The pixel of Claim 8 wherein said raised ridge structure has a height of about 0.2 microns.

13. (Cancelled)

14. (Original) The pixel of Claim 8 further including a color filter layer between said micro-lens and said light sensitive element.

15. (Currently Amended) A method of forming a pixel of an image sensor comprising:

forming a light sensitive element in a semiconductor substrate;

forming a top planarizing layer of oxide over said light sensitive element;

isotropically dry etching the top planarizing layer of oxide to form a horizontal top surface and a raised ridge structure from said top planarizing layer, said raised ridge structure extending above the horizontal top surface and encompassing said light sensitive element; and

forming a microlens within the interior of said raised ridge structure and over said light sensitive element, wherein said raised ridge structure has a triangular cross-section and at least partially supports said micro-lens, wherein the micro-lens overlays a base portion of the raised ridge structure such that a maximum width of the micro-lens is greater than a width of the micro-lens at the horizontal top surface of the layer of oxide.

16. (Cancelled)

17. (Previously Presented) The method Claim 15 wherein said raised ridge structure confines said micro-lens.

18. (Original) The method of Claim 15 wherein said raised ridge structure is a closed shape.

19. (Original) The method of Claim 15 further including forming a color filter layer between said micro-lens and said light sensitive element.